INCH-POUND

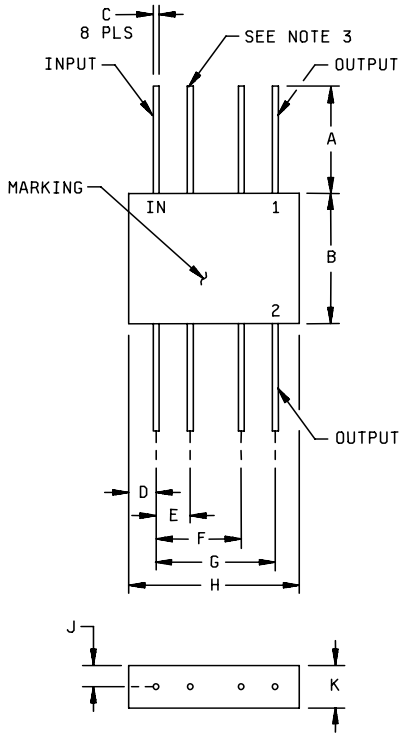
MIL-DTL-23971/5B
23 April 2002
SUPERSEDING
MIL-P-23971/5A
22 February 1980

DETAIL SPECIFICATION SHEET

POWER DIVIDERS, N-WAY, O DEGREES, FLAT PACK

This specification is approved for use by all Departments and Agencies of the Department of Defense.

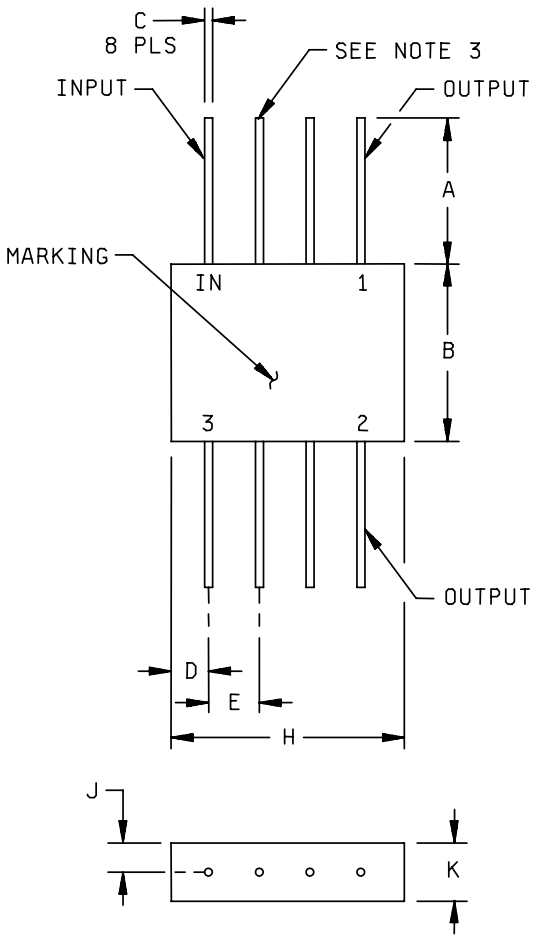
The requirements for acquiring the power divider described herein shall consist of this specification sheet and MIL-DTL-23971.



	Dimensions			
	Inches		Millimeters	
	Max	Min	Max	Min
A	N/A	.313	N/A	7.95
B	.41	.35	10.4	8.9
C	.019 dia	.015 dia	.48 dia	.38 dia
D	.11	.05	2.8	1.3
E	.11	.09	2.8	2.3
F	.26	.24.	6.6	6.1
G	.36	.34	9.1	8.6
H	.53	.47	13.5	11.9
J	.072	.052	1.83	1.32
K	.125	N/A	3.18	N/A

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Pins that are marked, are grounded to the internal circuit of the power divider by the manufacturer.

FIGURE 1. Dimensions and configuration, 2-way, dash numbers 01 and 03.



	Dimensions			
	Inches		Millimeters	
	Max	Min	Max	Min
A	N/A	.313	N/A	7.95
B	.41	.35	10.4	8.9
C	.019 dia	.015 dia	.48 dia	.38 dia
D	.11	.05	2.8	0.4
E	.119	.099	3.02	2.51
H	.53	.47	13.5	11.9
J	.072	.052	1.83	1.32
K	.125	N/A	3.18	N/A

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Pins that are marked, are grounded to the internal circuit of the power divider by the manufacturer.

FIGURE 1. Dimensions and configuration 3-way, dash number 02.

TABLE I. Electrical performance characteristics and physical requirements.

M23971 /5-	Imped-ance (ohms)	Frequency range (MHz)	Average coupling (dB)	VSWR max	Insertion loss max (dB)	Isolation min (dB)	Phase balance max (degree)	Amplitude balance (dB) max	Power level		Weight pounds (grams)	Ambient temperature		Figure
									avg (W)	pk (W)		Operating	Storage	
01	50	5-25	3. +.2, -.0	1.3:1	0.3	25	±1.0	±0.1	0.5	1.0	.006 (2.83)	-35° to +105°C	-40° to +125°C	1
02	50	0.2-200	4.8 +.5 -0.0	1.3:1	0.5	25	±2.0	±0.2	0.5	.5	.006 (2.83)	-55° to +125°C	-55° to +125°C	2
03	50	10-500	3. +.2 -0.0	1.3:1	0.5	30	±1.0	±0.1	1.0	N/A	.006 (2.83)	-55° to +85°C	-55° to +85°C	1

REQUIREMENTS:

Design and construction: See figures 1 and 2.

Case: Hermetically sealed.

Material: Cold rolled steel or iron nickel alloy in accordance with SAE-AMS-I-23011, class I (KOVAR).

Finish: Gold electroplated per SAE-AMS-2422 or ASTM-B488, type III, class 2, over nickel strike .00002-.00005 thick.

Cover: Cold rolled steel or iron nickel alloy in accordance with SAE-AMS-I-23011, class I (KOVAR).

Finish: Electroless nickel per MIL-C-26074, class I, 0.00012 inch thick.

Terminals: Iron nickel alloy in accordance with SAE-AMS-I-23011, class I (KOVAR). Gold-plated in accordance with SAE-AMS-2422 or ASTM-B488, type III, class 2, over nickel strike .00002-.00005 thick.

Nickel is to be used in this component only if specification cannot be met using alternate material means.

Electrical characteristics: See table I.

Weight: See table I.

Ambient temperature: See table I.

Environmental tests: In accordance with MIL-DTL-23971 except:

Dash No. 01:

Barometric pressure: Not applicable.
Thermal shock: In accordance with method 107 of MIL-STD-202, test condition F.
Vibration: In accordance with method 204 of MIL-STD-202, test condition D.
Shock: In accordance with method 213 of MIL-STD-202, test condition I.
Salt spray: Not applicable.

Resistance to soldering heat: +600°F for 10 seconds.

Part number: M23971/5-(dash number from table I).

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5985-1227-05)

Review activities:
Navy - AS, MC, OS